

March, 31, 2011

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF PURCHASING AND SUPPLY
SPECIFICATIONS FOR
FURNISHING AND INSTALLING ELECTRONIC AIR CLEANERS**

PURPOSE:

The purpose of this specification is to create a purchase requirement for ceiling mounted electronic air cleaning devices for use by the Department of Motor Vehicles, Agencies, and other Public Bodies of the Commonwealth of Virginia for use in areas of buildings requiring air cleaning.

SCOPE:

This specification covers furnishing and installing electronic ionization-type air filter equipment at two locations of the Department of Motor Vehicles, **one (1) unit** at the Isle of Wight Office, 912 South Church St., Smithfield, VA 23430 and **three (3) units** at the Charlottesville Office, 2360 Commonwealth Drive, Charlottesville, VA 22906

The following specifications are intended to define the minimum level of quality and performance of the requested product, and are meant to be met or exceeded. The specifications are not meant to be restrictive as to brand name or manufacturer. All equipment bid may be the brand name and model, or shall be **equivalent** to brand names and/or any other specification elements using the **Use of Brand Names** clause (see General Terms and Conditions) in making an equivalence determination.

BIDDER REQUIREMENTS:

Bidders/Vendors shall submit complete technical data of the product being offered, with an itemized comparison of the product offered with these specifications. Bidders/Vendors shall indicate equivalence on the specifications form next to each specification item, using the lines provided across from the specification items. Bidders/Vendors shall indicate any deviations with appropriate reasons and documentation. The Commonwealth reserves the right to obtain technical data and to request clarification when deemed necessary. **Failure on the part of the bidder/Vendor to provide all requested documentation may be cause to reject the bid/request as non-responsive.**

Bidder must provide all materials, labor, supervision, tools and incidentals to furnish and install the equipment in this specification.

Provide documentation of warranty for the product offered in answer to this request for bid.

SPECIFICATIONS:

<u>Specifications Data</u>	<u>Equivalent Item Data</u>
Air filter shall be the electronic ionization type, ceiling mounted, protruding from ceiling approximately 13".	<hr/> <hr/>
Unit must be completely self-contained, listed per U.L. standard 622C, 90% average efficiency rating based on	<hr/> <hr/>

American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Dust Spot Method standard 52-76.

Output to be 1000 C.F.M. minimum air handling capacity.

Fan speed settings may be a 2- or 3-position switch or variable speed control.

Include an on-off and performance indicator light.

315 watts approximate maximum power consumption, at 120 volt, 60 Hertz, single phase operation.

Unit shall remove airborne particulate matter such as cigarette smoke, dust molds, and pollen from DMV Customer Service Offices or similar office environment.

Electronic air filter system shall provide a rate of air exchange within the range of 6 to 15 minutes based on normal occupancy of approximately 80 people at any given time. More than one unit may be required, depending on room size, to provide needed rate of air exchange. See "Scope" section for unit quantities required.

Unit size shall be approximately 30" x 30" x 13".
Installed weight 75 lbs. maximum.

All filter electrostatic collectors and pre-filters shall be easily and quickly removable without special tools by the Agency employees or cleaning staff, and shall be completely protected from shock hazard by safety interlocks. All filters shall be capable of being cleaned (without special equipment or chemicals) by soaking or rinsing with water and detergent.

Unit may be a Honeywell F90A, White-Rogers CSC 1000, or equivalent.

INSTALLATION:

Unit shall be installed in the ceiling by the Contractor, but any required runs of electrical conduit and wiring, or electrical panel board modifications will be the responsibility of the Agency.

Agency will provide final electrical hook-up to air cleaning unit as recommended by the Contractor. The Contractor shall perform final check-out and initial start-up.

All work shall be performed to achieve full operational status of equipment, including all required processes to provide a complete and finished installation, in full compliance with the Virginia Uniform State-wide Building Codes, and as recommended by the equipment manufacturer, and approved by the Agency. Contractor shall furnish the Agency with a complete set of instruction, operating and service manuals, and copy of the warranty.

SITE VISITATION:

All prospective bidders are expected to visit the agency work site and to carefully examine the site of the proposed work, along with documented requirements, before submitting a bid. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work. Arrangements for site visitation may be made by contacting _____ at (xxx) xxx-xxxx.

COMPLETE INFORMATION:

All bidders shall state manufacturer and product offered and enclose complete and detailed product information with bid for all products offered. This is required even if quoting on the exact brand name as shown. Failure to do so may cause bid to be considered as nonresponsive.

LIFE CYCLE COST EVALUATION:

Award for electronic air cleaners will be determined by life cycle cost evaluation in addition to specifications. Electrical consumption will be evaluated at maximum rated capacity CFM. Life cycle cost will be determined by the following equation:

$$LCC = P + \frac{E \times W \times T}{SC \times RC \times EF}$$

P = Price bid

E = Energy cost @ 0.00007/watt-hr.

W = Watts energy consumption at max. CFM

T = Time in use over 10 year period = 37,440 hrs.

SC = Specification CFM flow capacity reciprocal = 1/1000

RC = Rated capacity at maximum CFM

EF = Efficiency at maximum CFM (Expressed as Decimal)

IMPORTANT! - STATE THE FOLLOWING WITH YOUR BID:

Manufacturer: _____

Model No.: _____

Unit Bid Price: \$_____ TOTAL PRICE (3) UNITS: \$_____

Watts Energy Consumption at Max. CFM _____ Watts

Efficiency (%) at Max. Rated CFM: _____%

WORK SITE DAMAGES:

Any damage to finished surfaces resulting from this installation shall be repaired to Agency's satisfaction by the Contractor at his expense.

WARRANTY:

The Contractor shall provide a warranty for the entire unit against defective materials, workmanship and performance for a period of one year from the date of acceptance of the installation. Contractor hereby agrees to furnish, without cost to the Commonwealth of Virginia, all transportation both ways for replacement of all parts and materials which are found to be defective during the warranty period.

DELIVERY AND INSTALLATION:

The Agency expects delivery and complete installation by 30 days ARO. Bidders shall indicate their firm delivery and complete installation date as follows:

The completion date may be a factor in making the award.